Diagr Proposels for Discussion

Residential Removal Activities
July 17, 2002 Conference Call Agenda



Soil Removals

- Contaminated areas within a property will be identified based on sample results from Phase 1.
- Supplemental soil sampling and visual inspections may be necessary to further delineate the extent of contamination both horizontally and vertically.
- If contaminated layer extends to only 6 inches below ground surface, then the vac truck will be used to remove the soil. Where contamination extends past 6 inches, an excavator will be used to a depth of 18-inches. Confirmation samples will be collected after excavation to verify clean soil. Maximum excavation at residential properties will be 18-inches. Further excavation at levels higher than 2%?
- Background air sampling- up to five stationary air samples at the perimeter of exclusion zone.
- Perimeter air samples will be collected while removal activities are ongoing- up to
 five stationary air samples at the same locations as background air sampling. Action
 level will be 2 structures (evaluate last years data)? If ≥ 2 structures are found on a
 perimeter air sample during excavation activities, the following actions will be
 employed:
 - o Reevaluate engineering controls
 - Reevaluate excavation methods
- Neighbors will not be relocated.
- Air clearance sampling: up to five stationary air samples at the same locations as background and perimeter air samples.
- Clearance criteria: 1) Confirmatory soil sample results are ND by polarized light microscopy (PLM). 2) Air clearance sample analyzed by PCM and TEM AHERA should be ND or less than background air sampling results before the exclusion zone (yard, garden or flowerbed) can be de-regulated.
 - o Perimeter samples from last day of excavation used as clearance if ND and if appropriate volume of air is collected?

Vermiculite-Containing Insulation Removals

Scenario 1- If vermiculite is in walls and attic, a negative pressure enclosure (NPE) will be constructed such that both the attic and exterior walls will be the same NPE (i.e., both spaces utilizing the same negative air):

- Six background air samples will be collected in the attic space, living space, and
 on the outside of the exterior wall (2 from each area).
- Ambient air samples will be collected around the outside of the NPE during removal: 1 air sample on each side of the NPE.

- Personal breathing zone (BZ) samples will be collected on the removal contractor's personnel.
- Ambient air samples will be collected within the living spaces during insulation removal.
- Seven air clearance samples will be collected. Five air clearance samples will be collected in the NPE by aggressive method- 2 air samples will be collected in the living space during aggressive clearance in the NPE.
- The removal contractor personnel will wet-wipe and HEPA vacuum interior of residence (based on dust sample results?). Personal BZ samples will be collected on the removal contractor personnel during this task.
- Air clearance sampling will be conducted in the living space
 - o Passive/Aggressive?
 - Clearance Criteria by PCM and modified (i.e., 70% reduction) AHERA?
 - o Functional Spaces (Basement-Ground Level, 2nd floor are 3 separate functional spaces in many of the houses triple the number of clearance samples).
 - Should personal air sample results be used for determining if further cleaning is necessary?

Scenario 2- If vermiculite is in attic only:

- 2 Background samples will be collected in the attic.
- Ambient air samples will be collected in the living space and around the four sides of the house during removal
- Personal BZ samples will be collected on the removal contractors' personnel during removal.
- Five final clearance air samples will be collected by aggressive method inside of the attic space.
- Clearance criteria- Air clearance sample analyzed by PCM and TEM AHERA should be ND or less than background air sampling results before the attic space can be deregulated?

Dust Contamination Removal

- Criteria for determining if a house is contaminated (i.e., 5,000 s/cc).
- Clothes will not be addressed (i.e., cleaned)
 - o Clothes cleaning experiment at the Powers?
- Cleaning will include HEPA vacuum and wet wipe.
- HVAC system will be cleaned/replaced.
- Clearance criteria?